access on a stand-alone basis, any results will be flawed. The results will be flawed because the calculation will depend on arbitrary allocations of shared, joint, and common inputs that have no foundation in reality.

The total factor productivity ("TFP") study provided by Sprint Nextel as Exhibit 2 to its comments, which is an updated version of a study originally filed by Economics and Technology, Inc. ("ETI") in 2005, is exactly such a flawed study. The ETI study incorporates precisely the type of arbitrary allocation of inputs that are discussed in Embarq's original comments. Consequently, the study results are unreliable and cannot be used.

An examination of the documentation accompanying the original study reveals the arbitrary nature of these allocations. For example, to calculate a TFP for special access it is necessary to determine the quantity of labor used exclusively in the provision of special access services, as well as the labor compensation dedicated exclusively to these services. No such measures are available. Faced with this, the ETI Study makes an arbitrary assumption that percentage of total plant in service ("TPIS") that is recorded for special access will represent the percentage of labor inputs and labor compensation that is dedicated to the provision of special access.<sup>48</sup> In other words, if special access accounted for 10% of a company's plant-in-service ETI assumed special access accounted for 10% of the company's employees. There is, of course, no evidence supporting such a

<sup>&</sup>lt;sup>48</sup> From Appendix 2 of the Reply Declaration of Susan M. Gately on behalf of Ad Hoc Telecommunications Users Committee filed July 29, 2005 in WC Docket No. 05-25, page 3 of 5: "Labor Compensation values were obtained from ARMIS Report 43-02, Table I1, and allocated to special access, based on the special access share of total TPIS, reported in ARMIS Report 43-01. ALSO "Number of Employees were obtained from ARMIS Report 43-02, Table I1, and allocated to special access, based on the special access share of total TPIS, reported in ARMIS Report 43-01."

correlation. Nor is there evidence of such a correlation between special access plant-inservice and special access labor compensation.

Similar arbitrary assumptions can be found in the ETI Study's treatment of capital. The study takes total company TPIS capital additions and allocates a portion of these to special access, based on the special access share of total company TPIS.<sup>49</sup> The obvious flaw in this approach—and a good illustration of the non-separability principal discussed above—is that the special access "share" of total company TPIS can and will change because of changes in the amounts of plant for *other* services, not just special access. Therefore, there is no reason to believe the relative change in the portion of TPIS that special access represents is equal to the change in the portion of capital additions that special access represents. The following table provides a simple illustrative example of this flaw:

<u>and the second of the second </u>	All Other Services	Special Access
TPIS End-of-Year 1	70M	30M
% of TPIS End of Year 1	70%	30%
Capital Additions During Year 2	50M	50M
TPIS End of Year 2	120M	80M
% of TPIS End of Year 2	60%	40%
% of End-of-Year TPIS attributable to Special Access		40%
% of capital additions actually attributable to Special Access		50%
% by which ETI approach understates Special Access		10%

Using the ETI approach, one would assume that capital additions attributable to special access were 40% of \$100M when in the example they are 50% of \$100M. Such an

<sup>&</sup>lt;sup>49</sup> *Ibid.* page 4 of 5. "TPIS Capital Additions are no longer reported in Table 14 of the TFP Model. Total company TPIS Capital Additions are obtained from ARMIS Report 43-02, Table B1b, and allocated to special access based on the special access share of total company TPIS, reported in ARMIS Report 43-01, Table 1."

assumption clearly understates the amount of capital added in the provision of special access and, as a result, overstates the increase in productivity.

In addition, the fact that the ETI Study (both in its original form and as updated-by-Sprint Nextel forms) continues to rely on ARMIS measures only exacerbates the study's flaws. Just as ARMIS data has been roundly and thoroughly discredited for use in calculating the supposed rates of return for special access, so too is it equally inappropriate for determining service-specific productivity measures. This is because the same flaws that render ARMIS inaccurate for rate-making (the application of Part 32 and Part 69 rules; the implications of the separations "freeze") render the ARMIS figures unreliable for TFP calculation. Accordingly, any analysis used in this proceeding that utilizes ARMIS data as its basis, must be summarily rejected.

# VII. THE RECORD DOES NOT SUPPORT IMPOSING ANY LIMITATIONS ON EMBARO'S CONTRACT AND TARIFF TERMS.

Numerous commenters object to what they call "lock in" terms in ILEC pricing flexibility contracts and discounts plans. It is no surprise that many ILECs provide volume and term discounts, however, just like many CLECs provide volume discounts for their high-capacity services, because there is a sound cost justification for such discounts. This is nothing peculiar to telecommunications and especially not to ILEC special access with respect to the quid-pro-quo for a discount.

However, the commenters are complaining about discount plans that require circuit commitments. Their complaint is that because of these "lock in" provisions that

<sup>&</sup>lt;sup>50</sup> Order on Reconsideration, *Policy and Rules Concerning Rates for Dominant Carriers*, 6 FCC Rcd. 2637, ¶ 199 (1991) (category-specific returns reported in ARMIS "do not serve a ratemaking purpose").

the carrier must agree to in order to receive a discount in the few locations where there is, allegedly, little competition, the carrier cannot buy from competitors even where there is substantial competition. These carriers want these "lock in" provisions to be prohibited and want a fresh look opportunity for their existing obligations.

Embarq certainly can't speak for other ILECs and is not familiar with all of the other ILECs current offerings. However, Embarq has several different discount plans. Customers have the choice of month to month rates and of different discount plans, including 3 year term plans, 5 year term plans, 5 year Premier term plan and a Revenue Volume Discount Plan. Based on customer input and competitive market forces, Embarq has developed these multiple plans to meet the needs of multiple customers.

For example, in response to customer requests and competitive market forces, Embarq introduced a new Revenue Volume Discount Plan, in June 2006 for DS1s, DS3s, SONET, and Ethernet Transport. There are no installation non-recurring charges. There are no circuit commitments. Rather, the plan provides an increasing amount of discount for higher revenue amounts. The greater the revenue volume, the greater the discount. Conversely, the lesser the volume, the lesser the discount, but there is no penalty for falling below a certain amount.

On the other hand, in return for a circuit commitment (although the circuit quantities are portable), Embarq's 3 year, 5 year, and Premier Term Discount plans do have minimum circuit and term commitments, similar to wireless carriers providing a discount on phones when a customer signs up for a two-year contract. There are no installation non-recurring charges, however, such as with the month to month rates. For Embarq term plans, there is also a declining price where the customer subscribes to a

longer term; 5 year prices are lower than 3 year and Premier is lower than 5 year because of longer term and higher circuit minimums. This is also similar to wireless carriers providing a discount on minutes when a customer commits to a greater number of minutes, but if the customer does not use all of the minutes, he must still pay the price for the service he subscribed to.

The record does not provide the basis for prohibiting all discount plans based on circuit commitments, nor does it support the imposition of fresh look obligations. Given the flexibility and options that Embarq provides its customers, there is no reason to disrupt existing customer – Embarq relationships or to limit the variety of current or future plans that Embarq offers its customers.

# VIII. THE RECORD SUPPORTS CHANGES TO THE TRIGGERS FOR PRICING FLEXIBILITY.

The only changes to pricing flexibility that this record will sustain are changes to the pricing flexibility trigger that determines when competition is present and the use of an MSA for the geographic market. Indeed, this appears to be one area where there is agreement among the parties – at least as to the problem areas.

Embarq's comments demonstrated that the current pricing flexibility triggers are under-inclusive; failing to provide pricing flexibility in areas where the collocation based triggers were not met, but where there was facilities-based competition.

AT&T cites the same problem.

The evidence of the underinclusiveness of the collocation-based pricing flexibility triggers is unmistakable in the marketplace: one merely has to look at some of the MSAs where AT&T has been unable to qualify for Phase II channel termination relief to confirm that, far from being too lenient, the existing test is far too stringent. For example, AT&T has not yet attained Phase II pricing flexibility for channel terminations in

Chicago, Dallas, Houston, Detroit, San Francisco-Oakland, San Diego, and St. Louis, – respectively, the 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 12<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> largest MSAs and some of the most competitive areas in the country. <sup>51</sup>

Interestingly, the ineffectiveness of the triggers is one area where purchasers of special access and ILECs agree, at least in part. Both believe the current triggers do not identify when there is true facilities-based competition, with the ILECs claiming the triggers are underinclusive and the purchasers of special access arguing that the triggers are overinclusive; granting pricing flexibility where no competition exists<sup>52</sup>

Additionally, many of the purchasers of special access complain, and Embarq agrees, that using an MSA as the geographic market for pricing flexibility does not effectively recognize competition. For example, Sprint Nextel explained:

Moreover, the FCC properly rejected the use of MSAs as the relevant geographic market for both dedicated transport as well as high capacity loops in the *UNE TRRO*. [Citation omitted.] The Commission noted that an MSA approach "would require an inappropriate level of abstraction, lumping together areas in which the prospects for competitive entry are widely disparate. [Citation omitted.] The Commission, instead, adopted a narrower market definition, based on wire centers, ....<sup>53</sup>

Embarq agrees that wire centers provide a more accurate geographic market for purposes of determining the existence of true facilities-based competition. And, to address the concerns of parties over underinclusion and overinclusion Embarq suggests the Commission abandon the collocation-based triggers in favor of one that uses carrier and competitor data to determine the presence of existing facilities-based competition.

Any such changes must be made on a prospective basis. Embarq and its customers have relied on Commission orders in establishing existing plans and pricing

53 Sprint Nextel at p. 15.

<sup>&</sup>lt;sup>51</sup> AT&T at p. 28.

<sup>&</sup>lt;sup>52</sup>See e.g., BT Americas Inc. at p. 12 and T-Mobile at p. 8.

flexibility contracts. There is no basis or record demonstrating that they are unlawful; rather, the record evidence simply demonstrated that more granular measures are necessary on a prospective basis to better recognize competition.

#### IX. CONCLUSION

The Commission should conclude that: (1) the complaints do not provide any basis for Commission action against Embarq because they focus primarily on the large integrated BOCS and contain no specific complaints about smaller, and more rural ILECs; (2) alternative suppliers and technologies are present today and special access competition is robust; (3) the record is not and cannot be complete such as to allow the Commission to complete its deregulation of special access until the Commission receives data from all providers; (4) the service about which there are the most complaints—DS1 channel terminations—does not earn an excessive rate of return; (5) re-initialization of any special access rates based on this record would be unlawful and bad public policy; (6) the record does not support the re-imposition of a productivity factor; (7) the record does not support imposing any limitations on Embarq's contract and tariff terms; and (8) the record supports eliminating the collocation-based pricing flexibility triggers in favor of one evidencing actual competition and shrinking the relevant geographic market from one MSA to a wire center.

Respectfully submitted,

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August 15, 2007

### EMBARQ REPLY COMMENTS

### WC DOCKET 05-25 RM-10593

**AUGUST 15, 2007** 

ATTACHMENT A - KENT W. DICKERSON

# Before the Federal Communications Commission Washington, D.C. 20554

In the matter of	)	
Special Access Rates for Price Cap	}	WT Docket No. 05-25
Local Exchange Carriers	į	
AT&T Corp. Petition for Rulemaking	) )	RM-10593
To Reform Regulation of Incumbent	)	
Local Exchange Carrier Rates for	í	
Interstate Special Access Services	í	

#### DECLARATION OF KENT W. DICKERSON

Comes now the declarant, and states as follows:

1. My name is Kent W. Dickerson and I am currently employed by Embarq Management Company, Inc. ("Embarq"), as Director – Cost Support. My business address is 5454 West 110<sup>th</sup> Street, Overland Park, Kansas 66251. I have worked for Embarq and or its predecessor for 22 years and have held positions of progressive responsibilities in Accounting, Regulatory, and Finance. Prior to entering the Telecommunications industry, I was employed as a Corporate Income Tax Auditor II for the Missouri Department of Revenue and subsequent to that I worked for Kansas Power and Light (now Western Resources) in the Tax and Internal Audit areas. I am a Certified Public Accountant in the State of Missouri and graduated from the University of Missouri – Kansas City with a Bachelor of Science Degree in Accounting. Since 1994, I have managed a work group which performs economic cost of service studies for retail and wholesale services (including Switched and Special Access Services), Unbundled Network Elements ("UNEs"), and specialized cost recovery programs (e.g., Federal number portability, Federal and State High Cost Assistance Programs).

My work includes developing and implementing cost study methods that comport with Total Service Long Run Incremental Cost ("TSLRIC") and Total Element Long Run Incremental Cost ("TELRIC") methodologies. I am responsible for written and oral testimony, serving on industry work groups, and participating in technical conferences related to TSLRIC/TELRIC costing methodology, and filing of studies within the 18 individual states that comprise Embarq. I have provided testimony in Nevada, Texas, Missouri, Kansas, Pennsylvania, Minnesota, North Carolina, Florida, Georgia, Virginia, Tennessee and at the Federal Communications Commission ("FCC").

- 2. This Declaration is being filed to respond to numerous carriers' (e.g. Sprint Nextel, Time Warner Telecom Inc., XO, Covad, etc.) generic claims and complaints regarding Special Access pricing. I will demonstrate how the generic claims that ILECs' prices for Special Access DS-1 Channel Terminations are substantially above their economic cost is simply not true for Embarq, in the markets it serves. I will also provide a demonstration that Embarq's pricing of DS-1 special access realistically can only have a negligible, (if any) impact on the availability of, and investment in new wireless networks. Thus the promise of cell tower buildout proliferation arising from their recommended forced reductions of Special Access DS-1 Channel Termination rates (which in effect would drive Embarq's rates further below their economic cost) will not realistically result from those actions.
- 3. Fortunately, there is a good deal of agreement in the comments that the economics of building cable routes carrying relatively low volumes of traffic between ILEC central offices and wireless carriers' cell tower locations are challenging to any business. Indeed as Sprint Nextel notes: "Further, as the Commission has recognized, the capacity required to serve a particular route has a material effect on the economics of deploying competitive facilities. ... That

approach, however, would make no sense as a matter of economics, because it would require an up-front investment in facilities along low-volume routes where there is substantial risk that the entrant would not be able to attract sufficient demand to recoup its investment." I agree with these statements. However, where I disagree is with the notion that somehow the mere label of "ILEC" magically insulates Embarq from those same high unit costs for DS-1 bandwidth that result from the relatively fixed cost of constructing cable route connections to cell towers at relatively low volumes traffic (e.g. DS-1 Channel Terminations). As such I also disagree with any claims that Embarq's special access rates are unreasonable and therefore must be artificially reduced.

- 4. In fairness, all associated data and analyses put forth in the comments of the parties arguing for Special Access price reductions (and in particular, for reductions in DS-1 level Channel Termination rates), are wholly focused on the rates of ATT and Verizon. Thus it is entirely possible many or all of those parties may understand and agree with my analysis and comments which follow. However, that determination cannot be made relative to the much used broad labeling of "ILECs". So least the Commission be persuaded to paint all rates (including Embarq's) with the same brush, I have engaged in illuminating analysis which I will now explain.
- 5. First of all, the parties that claim substantial over earnings for ILEC provided Special Access services continue to base these outrageous claims from ARMIS filing data. Similar reliance on ARMIS filing data was discredited in 2005 and it is even more so today. Simply put, ARMIS data uses severely outdated frozen jurisdictional separation factors which are inarguably integral to the mechanics yielding the mis-informed claims of excessive rates of return.

<sup>&</sup>lt;sup>1</sup> See e.g. Comments of Sprint Nextel, beginning at page 8.

- 6. A more meaningful gauge of relative earnings of DS1 Channel Terminations connecting to customer locations and cell towers could be derived from the use of forward-looking economic costs. All of the large ILECS and many of the mid-sized companies, including Embarq, have developed sophisticated cost modeling tools which allow for very granular, (down to a customer address level) cost analysis of discrete components of the network and associated services. Embarq, for example, has developed a sophisticated cost modeling tool which it uses in its daily operations in order to understand the cost of connections between its central offices and end user customer locations. These are most commonly called loop connections.
- TSLRIC studies reflect the total demand for loop connections between Embarq central offices and the purchasing customers' location, including the subset of Interstate Special Access DS1 Channel Terminations mostly commonly alleged to be at issue in the comments. Additionally Embarq's TSLRIC studies will reflect the use of currently available least cost technology at prices realistic to Embarq's operations and purchase volumes and equipment utilizations. Embarq's arms-length negotiated and market specific construction contractor prices are also used as key inputs in these cost analyses. Finally the operating expense inputs reflect forward-looking economic lives for capital recovery, risk adjusted cost of capital and maintenance factor estimates specific to the geographic market being analyzed.
- 8. In the normal course of business Embarq will complete these analyses using customer records extracted from Embarq retail, wholesale and access service billing databases. These data extracts allow the TSLRIC study to reflect a great deal of accuracy locating the end user customers to their specific service address at the specific volumes of the services they purchase at that same address. This approach then enables Embarq to identify the forward-looking cost of

specific services, including DS1 Special Access Channel Terminations, at a company, wire center, distance band and or customer address level of detail.

9. In order to gauge the relative earning of DS1 channel terminations for Embarq using forward-looking economic costs, Exhibit KWD-1, was prepared by me or at my direction, which analyzed the Returns on Investments for DS1 Channel Termination for Embarq's largest three local operations, i.e., Embarq Florida, Inc., Carolina Telephone and Telegraph d/b/a Embarq and Central Telephone Company d/b/a Embarq (North Carolina), and Central Telephone Company d/b/a Embarq (Nevada), using the TSLRIC model and methods just described.

These analyses are quite revealing and clearly undercut the claims of excessive earnings on special access DS-1 Channel Terminations. More specifically, the analysis shows that not only do DS1 Channel Terminations rate band greater than 3 miles not recover their efficient TSLRIC of the service but that it causes the overall average for all DS1 Channel Terminations to customer premises outside the central office earn far below their economic cost of service. In fact, the earnings of the DS-1 Channel Terminations are negative when properly measured against accurate forward-looking costs. This is extremely telling because it is these DS1 Channel Terminations which Wireless Carriers commonly purchase to connect to their wireless tower locations. Thus Embarq's analysis shows that the Wireless carriers "over-earnings" allegations regarding DS1 Channel Termination connections to their wireless tower locations is in fact an under-earning service segment within Embarq's overall Special Access services. This is in no small part due to Embarq's overall sales of DS1 Channel Terminations being substantially composed of, and impacted by, the same expense to construct and maintain low volume routes that the purchasers of Special Access discuss repeatedly in their comments. Thus if any price action were to be contemplated it would much more logically be to allow for price increases for

the greater than 3 mile distances which are currently priced below their reasonable and efficient forward-looking costs.

- 10. As shown above, there is no excessive "over-earnings" with respect to Embarq's provision of DS1 Channel Terminations. However, even if there was, the claim that forced price reductions would lead to more rapid deployment of cell towers is disingenuous. For example, Sprint Nextel claims that "... backhaul costs make up 33% of the costs of operating a cell site," and goes on to say "... reasonable special access prices would contribute significantly to Sprint Nextel's ability to improve the quality of its CMRS offerings by freeing up funds for the construction of additional cell sites ..." However, analysis shows otherwise.
- 11. Exhibit KWD-2 provides an analysis of the potential costs for constructing and operating a new wireless tower. This analysis illustrates that the monthly expense to purchase 2 DS1 channel termination connections from the new wireless tower to Embarq's central office (using the 0-3 mileage band rate) is less than 3% of the total monthly operating costs of the new tower site, when all necessary costs are reflected in the analysis. Embarq's analysis included estimates for constructing a new tower, Cell site electronics and carrier systems, switch electronics, power costs and special access circuit lease expense for both the channel termination connections and interoffice transport. These newly constructed assets were converted into a monthly cost using annual charge factors, (then divided by 12 months to get to monthly cost) which include capital recovery, cost of capital, income taxes, and maintenance costs. The analysis shows in short that the pricing of special access has negligible (if any) impact on the availability of, and investment in new wireless networks. The assertion put forward that special access pricing of DS-1 Channel Terminations providing connections to wireless network tower

<sup>&</sup>lt;sup>2</sup> Declaration of Gary Lindsey, paragraph 7, attached to Comments of Sprint Nextel Corporation.

<sup>&</sup>lt;sup>3</sup> See e.g., Comments of Sprint Nextel, page 33, section V(A)

locations, present a substantial deterrent to establishing more wireless tower locations is simply not credible.

Thus Embarq's analysis shows the relative expense of two DS1 Channel Termination circuits is effectively miniscule in the overall cost of constructing and operating a prospective new wireless tower location. This less than 3% of the total monthly operating cost then cannot be credibly argued to be a factor in a wireless carrier's decision or ability to construct a prospective new tower location as some have attempted to do.

Sprint Nextel's claim that the special access backhaul expenses represent 33% of the total cost is obviously suspect. Having in effect sold approximately 6,500 of their towers to Global Signal for \$1.2 billion in May, 2005, Sprint Nextel's represented 33% is not a true measure of the complete operating costs of a cell tower location. The analysis in KWD-2 strongly suggests the denominator in Sprint Nextel's purported 33% ratio must undoubtedly lack many of the true total operating costs of a cell site tower and electronics (including most likely the exclusion of costs for towers which they no longer own).

While certain wireless carriers would no doubt be happy to receive a price decrease for any operating expense they incur, (including Special Access DS-1 Channel Termination rates), it could not and would not equate to any enabling of new wireless tower buildouts relative to the overall economics of those same potential buildouts. It is a hollow promise absent meaningful cause and effect economics.

12. This concludes my Declaration.

Kent W. Dickerson

Kent W. Dickerson

Dated: August 14th, 2007

#### EMBARQ REPLY COMMENTS

### WC DOCKET 05-25 RM-10593

**AUGUST 15, 2007** 

EXHIBIT KWD-1 TO ATTACHMENT A - KENT W. DICKERSON

## EXHIBIT KWD – 1

### REDACTED - FOR PUBLIC INSPECTION

#### **EMBARQ REPLY COMMENTS**

#### WC DOCKET 05-25 RM-10593

**AUGUST 15, 2007** 

EXHIBIT KWD-2 TO ATTACHMENT A - KENT W. DICKERSON

#### EXHIBIT KWD - 2

## REDACTED - FOR PUBLIC INSPECTION